The History of Popular Science: Pop Science and Popularizations of Science

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Office: 2302 HSS, East Wing / Hours: Tues+Thurs 12-1, 3:45-4:15, 6:30-7:30  
Tuesday-Thursday 2-3:20 PM, Peterson 104

Grading: Take-Home Essay Midterm 40% + Take-Home Essay Final 60%.

Class Description:
This class is an “alpha” version: first time taught by me, thus still undergoing construction. The class is on the history of popular science, and much more, especially on the popularization of science and “pop science,” or science as seen by popular culture. Each session will be structured as about 50 minutes of lecture, followed by 30 minutes of discussion. The list of readings and films below is provisional – there is too much listed below, so we’ll discuss as a group, eventually, how much and what to do. Except for the first four books listed below, readings will be posted on the class website as pdfs, and are mostly articles or chapters from books – not whole books. Most of the films listed below will also be posted on the class website (in mp4 format) – the films will be posted in a timely way during the term.

Books (at UCSD Bookstore)
Kathleen Krull, Marie Curie: Giants of Science #4 (Giants of Science / Viking Juvenile).  

PDFs (to be reproduced in part or in whole on the class website: )
Anon, The Historie … of Doctor John Faustus (1587; 1592; 1965).  
David Basalla, “Pop Science: The Depiction of Science in Popular Culture” (1976).  
William Clark, The Romance of the Scientist (manuscript).  
Craig McCracken et al., The Powerpuff Girls Movie: Mojo Jojo, My Story (2002).  
Video Sources (to be posted on the class website: )

Amen (2002).
Biography – Albert Einstein (2005).
The Boys from Brazil (1978).
Colossus – The Forbin Project (1970)
Doctor Faustus (1968).
Dracula (1931).
Einstein (1979).
Einstein’s Wife (2003).
Frankenstein (1931).
Galapagos (2007).
Insignificance (1985).
Jane Goodall’s Wild Chimpanzees (2002).
Jane Goodall’s Return to Gombe (2003).
Marie Curie (1943).
Mary Shelley’s Frankenstein (1994).
The Search for Mengele (1985; 2008).
War Games (1983).

Lectures: Dates & Topics

MARCH
31 FABULOUS SCIENTISTS – INTRODUCTION: The Powerpuff Girls and Cartman’s Anal Probe.
   Read: Basalla, “Pop Science…”; McCracken, Powerpuff Girls. Optional – Read: Mead and Métraux,
   “Image of the Scientist…”.

PART 1: THE REVOLUTIONARY ERA, 1527 TO 1830
FAUSTIAN DEMONS & NEWTONIAN SAINTS

APRIL
02 THE FALLEN PHILOSOPHER: The History of Dr. Faust.
   Optional – Watch: Galileo’s Battle for the Heavens
14 THE ENLIGHTENED SCIENTIST: Franklin and the New Saints of Science.
Clark, Hist of Popular Science: 3

Read: Haynes, From Faust ..., chaps. 1-5; Swift, Gulliver’s Travels, pp. 78-103 (= Pt. 3, chaps. 1-6).

**ROMANTIC GENIUSES**

16 THE ROMANTIC SCIENTIST: Mesmerism and the End of the Enlightenment.
21 THE NEW PROMETHEUS: Frankenstein and the Cult of Genius.
   Optional – Watch: Frankenstein and Mary Shelley’s Frankenstein.

**MIDTERM TAKE-HOME ESSAY – DUE IN CLASS ON 23 APRIL**

**PART 2: THE CLASSICAL ERA, 1830-1920**

**THE OVERWORLD OF SCIENCE**

23 DARWIN’S BEARD: The Beetle-Collector as Genius.
28 HELMHOLTZ’S EYES: Prometheus Unbound.
   Read: Haynes, From Faust ..., chap. 8; Helmholtz, “Aim and Progress” and “On the Conservation of Force.”
   Watch: Biography – Thomas Edison; Tesla: Master of Lightning.

**THE UNDERWORLD OF SCIENCE**

MAY

   Read: Hirsch, “Frankenstein ... Jekyll and Hyde”; Lawler, “Reframing Jekyll and Hyde”; Leatherdale, Dracula;
   Senf, Dracula. Optional – Watch: Dracula and Bram Stoker’s Dracula.

**PART 3: The Modern Era, 1920-2000**

**THE MATHEMATICO-PHYSICAL SCIENCES**

12 CURIE’S HANDS: Marie Curie and Radioactivity.
   Read: Krull, Marie Curie. Watch: Marie Curie.
14 EINSTEIN’S HAIR: Albert Einstein, the New Saint of Science.
   Read: Clark, Romance, pp. TBA. Watch: Einstein and Einstein’s Big Idea. Watch – Optional: Einstein’s Wife;
   Einstein Revealed; Insignificance.
19 OPPENHEIMER’S HAT: J. Robert Oppenheimer, the New Martyr of Science.

**THE BIO-MEDICAL SCIENCES**

21 JOSEPH MENGELE: The Nazi Doctors and “Scientists from Hell.”
   Read: Clark, Romance, pp. TBA. Watch: Search for Mengele and The Boys from Brazil. Watch – Optional: Amen.
26 FRANKLIN, CRICK, AND WATSON: DNA and The Quest for the “Secret of Life.”
   Read: Watson, The Double Helix; Watch: DNA.
28 JANE GOODALL: Chimps, National Geographic and the “Female Touch.”
   Read: Haraway, Primate Visions, chaps. 6-7. Watch: Jane Goodall’s Wild Chimpanzees; Watch – Optional:
   Jane Goodall’s Return to Gombe and Jane Goodall: Reason for Hope.

**THE CYBERNETIC-INFORMATIONAL SCIENCES**

JUNE

02 COLOSSUS: A.I.
   Read: Strathern, Turing. Watch: Colossus – The Forbin Project.
04 HACKERS: The Trickster’s Return.

**09 FINAL:** Take-Home Essay Due at 2 PM in Class